XXVI. Extracts *from the* Minute-Book *of the* Linnean Society *of* London.

June 7, 1825. On the retirement of Alexander MacLeay, Esq., F.R.S., &c. from the office of Secretary of the Society, the following Minute, recommended by the Council, was adopted by the General Meeting of the above date, viz.

"The Linnean Society of London take the earliest opportunity, after the retirement of Alexander MacLeay, Esq. from the Secretaryship of the Society, to record upon their Minutes the high estimation in which he is held by them, on account of twenty-seven years of unremitted and unrequited labour devoted to science; and that in quitting, for a time, this sphere of usefulness, to fill an honourable station in a distant country, he carries with him the cordial esteem and sincere regret of this Society."

Read a Letter from Mr. Charles Willcox, accompanied by Specimens of *Mytilus bidens*, found by him adhering to the bottom of His Majesty's ship Wellesley, which had nine years before arrived from India, but had not from that time quitted Portsmouth harbour. The species appears to propagate itself readily: and it seems very probable that it has become naturalized in the harbour, Mr. Willcox having found large masses of them.

Nov.

Nov. 5. Mr. Arthur Aikin, F.L.S. presented a Specimen of the *Astrantia major* L., found by him in an apparently wild state in a wood which covers the N.E. side of Yeoedge, a limestone hill, near Stokesay Castle, on the road between Ludlow and Church Stretton.

March 2, 1826. A Communication on the Locust (*Gryllus migratorius* Linn.) which lately devastated the Crimea and the southern provinces of Russia, was presented by John Smirnove, Esq., F.R. and L.S., Secretary to the Russian Embassy. The following are extracts:—"The Locust deposits its eggs in small bags composed of a thin membrane, about the size of an almond. Each of these bags is found to contain from 80 to 100 eggs; so that an idea may be formed of their amazing fecundity. In the spring, about the month of April, when the sun begins to give new life to vegetation, the eggs are quickly hatched, and the insects, in the shape of white beetles, are seen creeping out in myriads. In this state they spread themselves over whole fields during the day; but at night they collect together in clusters, and thousands of locust-hillocks may be seen in one corn-field. After remaining two or three weeks in the crawling state, the insects, daily gaining strength, next begin to leap. At this period they become destructive, from their destroying the springing corn and the young shoots of the vine; and gradually gaining strength, they spread themselves more and more, and unite in such multitudes, that in some places many miles in extent are covered with them in columns of from six to ten inches thick and upwards. In June they

they are furnished with wings; but they still remain leaping, though with additional power, being now assisted by their wings. Towards the end of the month and about the beginning of July, they cast off the whole of their upper hard covering, and become perfect flying Locusts. In this state they are exceedingly destructive, even to places at great distances; for their flight is rapid, and they are in such prodigious swarms, that their appearance in the air resembles a dense black cloud, obscuring the sun's rays, which when they penetrate, make these swarms appear like some object burning in the atmosphere. Alighting on the corn-fields, they in the space of a few hours devour every green thing, and convert immense tracts of cultivated land into absolute deserts, while nothing seems to impede their progress.

"In August the Locusts are observed busily twining themselves in pairs upon the ground: they are then in the act of copulation. In September they pierce, by means of their tail, small holes in the earth, in which they deposit their eggs in small bags, rapidly flapping their wings at the same time. Soon after this operation the insect dies.

"Various methods have been adopted to destroy the insect, either by ploughing the fields, and collecting the eggs; or, in the spring, at the dawn of day, while the insect is yet in the crawling state, by setting fire to straw which has been thrown over the locust-hillocks; or by sweeping them into sacks and destroying them. In the leaping state wide sacks are employed, into which they are driven by a person furnished with a broom; or by means of deep trenches dug in the field, into which they

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are driven and buried. In the flying state there is no effectual method to destroy them. When a flight of them in this state alight on a field, the country-people assemble with rattles and other instruments, and by making a great noise succeed in driving them away for the time; but it is only to take refuge in the neighbouring fields. By these methods much of the vermin was destroyed; but there still remained immense quantities, and their numbers daily increased from the adjacent countries; for at the time when in New Russia the Locusts had not yet attained the winged state, legions of them made their appearance, coming, as is supposed, from the Turkish provinces. Thus the inhabitants, who had been diligently labouring to cleanse their lands of the insects by which they were already desolated, were nowise relieved from them, seeing as they did their possessions infested by others from unknown regions; and all human means seemed unavailing to avert the famine with which the provinces were menaced."

June 6. Read a Communication from the Rev. Lansdown Guilding, B.A., F.L.S., containing various additions to, and corrections of, several of his former papers. To his generic character of *Ascalaphus*, given in *Linn. Trans.* vol. xiv. p. 139, he proposes to add: "*Palpi* —— hirsuti. *Mandibulæ* validæ, apice emarginatæ, dente majori. *Ova* cute pergameneâ tecta. *Larva* complanata, lateribus pectinatis, pedibus omnibus gressoriis, mandibulis elongatis, curvis, tubulosis, apice perforatis: ano stylato, stylo colifero. Dolo prædam captans. *Pupa* folliculata, folliculo rotundato."

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The examination of numerous specimens of the *Asc. Macleayanus* has induced him to amend the specific character and description as follows:—" A. alis vitreis immaculatis; oculis splendidissimè cupreo-nigris, lobis subæqualibus: thorace fuscescente, flavido maculato: dorso picto: lateribus cinereis.

*Descriptio.—Os pedes*que hirsuti, rufescentes: *antennæ* nigricantes, capitulo subtùs pallido: *thorax* et *facies* cinereo-pilosissimi. *Pterigostia* nigra: *stigmata* atra: *dorsum* ferrugineo-flavum, maculis brunneis ornatum: *latera* nigro varia. *Animal* insectivorum? sæpè die quiescit in arbustis vetustis emortuis, cum antennis alisque ramo applicatis, abdomineque in angulum (more ramuli) extenso, sic hostes decipiens. *Ova* numero 64—75 lanceolato-elliptica, cinerascentia, apicibus puncto candido, in extremitate ramulorum ponit imago; serie duplici alternatim agglutinans, et circulis multis *repagulorum* ab hostibus defendens. *Repagula* elongata, pedunculata, subdiaphana, rufescentia. *Larva: caput* subcordatum, fuscum, *genis* barbatis, supernè scabrum. *Os* nullum. *Mandibulæ* castaneæ, validæ, elongatæ, internè trispinosæ. *Oculi* suprà sex, infrà unicus, in *pedunculo* communi, crasso, posticè bisetoso, anticè appendiculato. *Antennulæ?* quatuor setiformes: *palpi* duo filiformes. *Thorax* parvulus, subovatus, suprà utrinque spinulâ brevi mobili, maculisque duabus nigris. *Abdomen* ovale, complanatum, scabrum, flavescens, livido irroratum, maculis quatuor anterioribus, duabus analibus, lineâque dorsali nigris: subtùs ferè concolor. *Pectines* utrinque decem, atro ciliati, anticis duobus (alarum rudimentis?) curvis. *Pedes* nigri spinulosi, duo anteriores thoracici. *Ungues* parvi, omnes simplices. *Tracheæ* parvæ, nigræ.

Larva

Larva segnis, corpus pectinesque arenulis tegens, mandibulisque sub lateribus reconditis prædam expectans. *Pullus* capite majori. *Pupa: corpus* flavescens, curvum, obesum, lanuginosum, abdomine livido irrorato, lateribus prominulis, bullatis: lineâ dorsali nigrâ. *Caput* hirsutum. *Mandibulæ* ferrugineæ. *Antennæ* supra oculos ad pectus reflexæ, *capitulo* evanido. *Oculi* nigricantes, bilobati. *Folliculus* arenulis colo anali mirè contextus, cuteque pellucido intùs tectus.

Figures of the eggs, *repagula*, and larvæ, accompanied the Communication.

By the term *Repagula* (barriers), Mr. Lansdown Guilding designates certain attendants on the eggs, which he conceives to be without analogies in the animal creation. "They are curiously placed in circles, and always on the extremity of a branch, so that nothing can approach the brood: nor can the young ramble abroad till they have acquired strength to resist the ants and other insect enemies." The female "may be seen expelling from her ovary these natural bodies with as much care as her real eggs."

To the description of the egg of *Xylocopa Teredo* (Linn. Trans. vol. xiv. p. 314.) is to be added "apicibus rotundatis:" and to that of the larva of *Horia maculata* (Ib. p. 316.) "corpus spinulis omninò indistinctis exasperatum. *Tracheæ* fuscæ. *Mandibulæ* ferrugineæ." Of the latter insect he states that several varieties exist, which will perhaps require hereafter to be regarded as so many species. The one figured *Linn. Trans.* vol. xiv. tab. 8, has the "frons plana, ocello inferiori in fossulâ subovatâ posito:" in another from South America, "*porca* elevata, bipartita, flexuosa, ocellos

subtùs cingit:" and in a third, from Barbadoes, "*porca* in duos processus auriformes irregulares expanditur."

To his list of *Onchidia* (Linn. Trans. vol. xiv. p. 323.) Mr. Lansdown Guilding adds the "*Limace Carolinienne*," (Bosc. Hist. Nat. des Vers, i. 8. pl. iii. f. 1.), a species "apparently allied to *O. occidentale*." He corrects the specific character of *Leptopodia ornata* (Ib. p. 335.), by stating, that all the feet of the male are spinous in front. He also corrects the specific name *Helicina fasciata* (Ib. p. 339.) by substituting for it *H. occidentalis*, "the two species being totally distinct." For the generic name *Caprella* (Ib. p. 341.) he likewise proposes to read *Plekocheilus*, "the former term having long since been applied to an interesting group of *Crustacea*."

Nov. 7. Joseph Woods, Esq. was chosen by ballot to fill up the vacancy in the Council, occasioned by the death of Sir Thomas Stamford Raffles, the Society having been specially summoned for the purpose of filling up such vacancy.

The Bye-Law respecting the loan of Books having been taken into consideration by the Council, it was ordered that the following be established as a Bye-Law of the Society; and that it be read at this and the subsequent Meeting of the Society, and be balloted for in the usual manner, viz.

"That no Book be allowed to be taken from the Society's House without the special leave of the Council, to be applied for in writing; that no more than two Volumes be lent to one person at the same time; that all Books be returned at the expiration of six weeks

weeks from the time of their being taken out; and that all Books so lent be regularly entered by the Librarian in a book appropriated to that purpose."

Dec. 5. The Bye-Law respecting the Loan of Books was balloted for and confirmed.

Feb. 6, 1827. A human Skull, accompanied by the following Communication, was presented from Dr. Harlan, of Philadelphia.—"This skull is supposed to have belonged to an extinct race of Indians, which existed anterior to the present natives of the soil. This is inferred not only from some marked differences in the Skulls observed on comparison with those of our modern Indians, but also from the peculiarities of the utensils, both of war and cooking, found with the Skeletons, and which resemble more those of the South Americans or East Indians.

"There are several saltpetre caves in Kentucky, but that from whence this Skull comes (Golconda) contains the most extensive remains, several cart-loads having been turned out, which are left mouldering on the soil. Occasionally whole mummies are found, preserved from decay by the atmosphere being strongly impregnated with nitre."

June 5. Mr. George Townshend Fox, F.L.S. exhibited from the Newcastle Museum, Specimens of *Loxia punctulata* L., *Loxia crassirostris* Gmel., and *Fringilla noctis* L., forming part of the late Mr. Allan's collection.

June 19. Mr. Leadbeater exhibited a Specimen of *Didelphis Ursina* (Linn. Trans. vol. ix. p. 174. t. 19.).